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EXAMINER	
WOZNIAK, JAMES S	
ART UNIT	PAPER NUMBER
2626	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/024,473	ABIR, ELI	
	Examiner	Art Unit	
	James S. Wozniak	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 January 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 10-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 10-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 January 2007* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. In response to the office action from 7/7/2006, the applicant has submitted a request for continued examination, filed 1/8/2007, amending claims 1, 10-17, and 19, while arguing to traverse the art rejection based on using overlapping sections to perform a translation *(Amendment, Pages 16-18)*.

2. In response to the amended drawings, the examiner has withdrawn the previous drawing objection.

3. In response to the filed compact disc containing computer code and associated amendment to the specification, the examiner has withdrawn the previous specification objection.

4. In response to the claim amendments, the examiner has withdrawn the previous claim objections.

Response to Arguments

5. The applicant's arguments directed to Claims 11, 17, and 18 *(Amendment, Pages 11-15 and 18)* have been fully considered, but are moot with respect to the new grounds of rejection set forth below.

With respect to the **Claims 1, 10, and 19-20**, the applicant argues Tominaga *(U.S. Patent: 5,311,429)* does not use the overlapping text sections to perform a translation *(Amendment, Pages 16-17)*. It is noted that the features upon which applicant relies (i.e., using overlapping text sections to perform a translation) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, the examiner points out that Tominaga does teach using combined text portions having overlapping segments for translation *(Col. 5, Lines 15-32; and Col. 16, Lines 26-35)*.

The remainder of the applicant's arguments with respect to Claims 1, 10, and 19-20 have been fully considered, but are moot with respect to the new grounds of rejection set forth below.

Drawings

6. The drawings are objected to because the parser shown in Fig. 3 is referred to as parsing in the specification as originally filed *(see Page 40)*. Thus, the new drawing should be amended

to change "parser" to –parsing-- to make the new drawing consistent with the originally filed specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. The disclosure is objected to because of the following informalities:

The applicant has provided new drawings (Figs. 2 and 3) that show subject matter from the specification as originally filed, but does not refer to the figures in the corresponding portions of the disclosure *(Pages 42-43 for Fig. 2 and Page 37 for Fig. 3).*

Appropriate correction is required.

Claim Objections

8. **Claim 10** is objected to because of the following informalities:

In Claim 10, Line 2, "the steps of" should be changed to –the steps of:--

Appropriate correction is required.

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. **Claims 19-20** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter:

Claim 19 is drawn to a description of a "program" data structure within a computing device processor *(see specification, Page 45)* and as such is non-statutory subject matter. See MPEP § 2106.IV.B.1.a. Data structures not claimed as embodied in computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In

contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized. The dependent claims fail to overcome the 35 U.S.C. 101 rejection directed towards the independent claims, and thus, are also directed to non-statutory subject matter.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. **Claims 1, 10, and 19-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al *(U.S. Patent: 5,477,451)* in view of Tominaga *(U.S. Patent: 5,311,429)*.

With respect to **Claims 1 and 19**, Brown discloses:

Receiving content expressed in a first state *(document in a source language, Col. 9, Lines 40-52)*;

Parsing the content expressed in a first state into a plurality of segments *(extracting individual portions from a document in a first segment, Col. 9, Lines 40-52)*;

Accessing a third segment of the content expressed in a second state, said third segment corresponding to one of the plurality of segments *(corresponding structures in a second language used in translation processing, Col. 38, Lines 18- Col. 39, Line 24; and Figs. 22-23)*;

Accessing an additional segment of the content expressed in the second state, the additional segment corresponding to the other one of the first and second segments *(further plurality of corresponding structures in a second language used in translation processing, Col. 38, Lines 18- Col. 39, Line 24)*; and

Providing the content expressed in the second state *(outputting a translated document, Col. 9, Lines 40-52)*.

Although Brown teaches a method for aligning and translating a plurality of extracted sentences from a document, Brown does not teach a means for processing sentences having overlapping portions by combining segments (sentences) having such portions. Tominaga, however, discloses a sentence processing means that combines sentences having overlapping portions into a single sentence for translation and returns non-overlapping portions with overlapping portions as a result of the processing *(Col. 14, Lines 42-61; Fig. 14; Col. 5, Lines 15-32; and Col. 16, Lines 26-35)*.

Brown and Tominaga are analogous art because they are from a similar field of endeavor in language translation. Thus, it would have been obvious to a person of ordinary skill in the art,

at the time of invention, to modify the teachings of Brown with the sentence generation means disclosed by Tominaga in order to achieve natural language translation processing that easily performs the maintenance of co-occurrence relations and avoids duplication of dictionary information *(Col. 2, Lines 30-34; and Col. 11, Lines 19-27).*

With respect to **Claim 10**, Brown discloses:

A method for translating idea content from a first state to a second state comprising the steps of:

Utilizing a database of segment associations between content in said first state and said second state to convert the content of the document in a first state into the document of a second state, wherein said conversion includes examining segments of content in said first state and segments of content in said second state *(document translation, Col. 9, Lines 40-52, utilizing a database of translation models indicative of aligned source/target language segments, Col. 38, Lines 18- Col. 39, Line 24)*; and

Associating the content of said first state content with said second state content *(language translation, Col. 9, Lines 40-52).*

Although Brown teaches a method for translating a plurality of extracted text portions from a document, Brown does not teach a means for processing portions having overlapping portions by combining segments (sentences) and removing overlapping portions. Tominaga, however, discloses a sentence processing means that combines sentences having overlapping portions into a single sentence and removes certain similar words based on their structure *(Col. 14, Lines 42-61; removal of "is" in a first sentence and removal of "girl" in a second sentence, Fig. 14; and Col. 5, Lines 15-32).*

Brown and Tominaga are analogous art because they are from a similar field of endeavor in language translation. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Brown with the sentence generation means disclosed by Tominaga in order to achieve natural language translation processing that easily performs the maintenance of co-occurrence relations and avoids duplication of dictionary information *(Col. 2, Lines 30-34; and Col. 11, Lines 19-27).*

With respect to **Claim 20**, Brown further discloses a memory storing a plurality of aligned translation models *(Col. 11, Lines 61-67).*

13. **Claims 11-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al *(U.S. Patent: 5,477,451)* in view of Tominaga *(U.S. Patent: 5,311,429)* and further in view of Chanod et al *(U.S. Patent: 6,393,389).*

With respect to **Claim 11**, Brown in view of Tominaga discloses the text translation method that aligns input document text to target language text and is capable of connecting text segments having overlapping portions within a language text, as applied to Claims 1 and 10. Brown further discloses extracting text portions (delimiting) from a document starting with the beginning of a source language document *(Col. 9, Lines 40-52).* Brown in view of Tominaga does not specifically suggest selecting a largest portion possible for alignment, however Chanod discloses such a concept *(Col. 14, Lines 65-67).*

Brown, Tominaga, and Chanod are analogous art because they are from a similar field of endeavor in language translation. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Brown in view of Tominaga with

the concept of selecting a largest text portion for translation matching as taught by Chanod in order to provide text processing having greater processing simplicity *(Chanod, Col. 14, Line 67- Col. 15, Line 1)*.

With respect to **Claim 12**, Brown further discloses continuing processing until a document has been completely translated *(Col. 9, Lines 40-52)*.

With respect to **Claims 13-16**, Brown discloses language translation of a plurality of words within a document portion *(Col. 9, Lines 40-52; and Figs. 22-23)*.

Claim 17 contains subject matter similar to Claims 10 and 11, and thus, is rejected for the same reasons.

Claim 18 contains subject matter similar to Claim 12, and thus, is rejected for the same reasons.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Church *(U.S. Patent: 5,608,622)*- discloses a method for comparing a source text to translated text.

Simard et al *("Bilingual Sentence Alignment: Balancing Robustness and Accuracy," 1996)*- discloses a method for sentence alignment for language translation.

Tiedemann *("Extracting Phrasal Terms Using Bitext," 2000)*- discloses a method for automatically generating translation phrase lists using parallel bitext.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached at (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S. Wozniak
6/5/2007

PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER